

-START-

File Edit Selection View Go Run Terminal Help • README.md - Visual Studio Code

• README.md •

Documents > UP > 2021-2 > CoE 197 > ME8 Containerization and Docker > 1-running_containers > • README.md > # Exercise 1: Running containers > ### Running our container

166 stopped.
167
168 Instead, let's add the `-it` flags, which tells Docker to run the command interactively with your terminal.
169
170
171 `$ docker run -it ubuntu:16.04 /bin/bash`
172 `root@5fa68739793c:/#`
173
174 This looks a lot better. This means you're in a BASH session inside the Ubuntu container. Notice you're running as `root`
and the container ID that follows.
175
176 You can now use this like a normal Linux shell. Try `pwd` and `ls` to look at the file system.
177
178
179 `root@5fa68739793c:/# pwd`
180 `/`
181 `root@5fa68739793c:/# ls`
182 `bin boot dev etc home lib lib64 media mnt opt proc root run/sbin srv sys tmp usr var`
183
184 You can type `exit` to end the BASH session, terminating the command and stopping the container.
185
186
187 `root@5fa68739793c:/# exit`
188 `$`
189
190
191 4. By default your terminal remains attached to the container when you run `docker run`. What if you don't want to remain
attached?
192
193 By adding the `-d` flag, we can run in detached mode, meaning the container will continue to run as long as the command is,
but it won't print the output.
194
195 Let's run `/bin/sleep 3600`, which will run the container idly for 1 hour:
196
197
198
199 `$ docker run -d ubuntu:16.04 /bin/sleep 3600`
200 `be730b8c554b69383f30f71222b9ac264367c7454790dc2a4eb0cda33c0baa2a`
201 `$`
202
203 If we check the container, we can see it's running the sleep command in a new container.
204
205
206
207 `$ docker ps`
208
209

Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell <https://aka.ms/powershell>
PS C:\Users\jcms1> docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
PS C:\Users\jcms1> docker search ubuntu
NAME STARS OFFICIAL AUTOMATED DESCRIPTION
ubuntu 12363 [OK] Ubuntu is a Debian-based Linux operatin
g sys...
dorowu/ubuntu-desktop-lxde-vnc 539 [OK] Docker image to provide HTML5 VNC inter
face ...
websphere-liberty 273 [OK] WebSphere Liberty multi-architecture im
ages ...
rastasheep/ubuntu-sshd 253 [OK] Dockerized SSH service, built on top of
offi...
consol/ubuntu-xfce-vnc 241 [OK] Ubuntu container with "headless" VNC se
ssion...
ubuntu-upstart 110 [OK] Upstart is an event-based replacement f
or th...
landinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5 50 [OK] ubuntu-16-nginx-php-phpmyadmin-mysql-5
based...
open-liberty 46 [OK] Open Liberty multi-architecture images
ubuntu-debootstrap 44 [OK] debootstrap --variant=minbase --compone
nts=...
i386/ubuntu 25 Ubuntu is a Debian-based Linux operatin
g sys...
landinternet/ubuntu-16-apache-php-5.6 14 [OK] ubuntu-16-apache-php-5.6
landinternet/ubuntu-16-apache-php-7.0 13 [OK] ubuntu-16-apache-php-7.0
landinternet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10 11 [OK] ubuntu-16-nginx-php-phpmyadmin-mariadb-
10
landinternet/ubuntu-16-nginx-php-5.6-wordpress-4 9 [OK] ubuntu-16-nginx-php-5.6-wordpress-4
landinternet/ubuntu-16-nginx-php-5.6 8 [OK] ubuntu-16-nginx-php-5.6
darksheer/ubuntu 5 [OK] Base Ubuntu Image -- Updated hourly
landinternet/ubuntu-16-nginx-php-7.0 4 [OK] ubuntu-16-nginx-php-7.0
pivotaldata/ubuntu 4 A quick freshening-up of the base Ubuntu
u doc...
landinternet/ubuntu-16-nginx-php-7.1-wordpress-4 3 [OK] ubuntu-16-nginx-php-7.1-wordpress-4
pivotaldata/ubuntu16.04-build 2 [OK] Ubuntu 16.04 image for GPDB compilation
pivotaldata/ubuntu-gpdb-dev 1 Ubuntu images for GPDB development
landinternet/ubuntu-16-sshd 1 [OK] ubuntu-16-sshd
landinternet/ubuntu-16-php-7.1 1 [OK] ubuntu-16-php-7.1
smarterentry/ubuntu 1 [OK] ubuntu with smarterentry
pivotaldata/ubuntu16.04-test 0 [OK] Ubuntu 16.04 image for GPDB testing
PS C:\Users\jcms1> docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
80bce6046fa: Pull complete

```
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201 $
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204
205 ...
206
207 $ docker ps
208
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS
NAME
he730b8c554h ubuntu:16.04 "/bin/sleep 3600" 41 seconds ago Up 40 seconds

root@dbaca913ecc5:/# exit
PS C:\Users\jcms1> docker run -it ubuntu:16.04 /bin/bash
root@975476ceab6d:/# pwd
/
root@975476ceab6d:/# ls
bin boot dev etc home lib lib64 media mnt opt proc root run sbin srv sys tmp usr var
root@975476ceab6d:/# exit
exit
PS C:\Users\jcms1> docker run -d ubuntu:16.04 /bin/sleep 3600
bfb7e16efb97ebf6e6d0c01093d36d59fff3c67997aa484e69ee59739fb40c56
PS C:\Users\jcms1> docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
bfb7e16efb97 ubuntu:16.04 "/bin/sleep 3600" 8 seconds ago Up 7 seconds sad_ba
bbage
PS C:\Users\jcms1> docker exec -it be7 /bin/bash
Error: No such container: be7
PS C:\Users\jcms1> docker exec -it bfb7 /bin/bash
root@bfb7e16efb97:/# ps aux
USER PID %CPU %MEM VSZ RSS TTY STAT START TIME COMMAND
root 1 0.0 0.0 4372 668 ? Ss 16:22 0:00 /bin/sleep 3600
root 8 0.1 0.0 18232 3212 pts/0 Ss 16:24 0:00 /bin/bash
root 19 0.0 0.0 34420 2856 pts/0 R+ 16:25 0:00 ps aux
root@bfb7e16efb97:/# exit
exit
PS C:\Users\jcms1> docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
bfb7e16efb97 ubuntu:16.04 "/bin/sleep 3600" 3 minutes ago Up 3 minutes sad_ba
bbage
PS C:\Users\jcms1> docker stop bfb7
bfb7
PS C:\Users\jcms1> docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
bfb7e16efb97 ubuntu:16.04 "/bin/sleep 3600" 4 minutes ago Exited (137) 8 seconds ag
o
975476ceab6d ubuntu:16.04 "/bin/bash" 7 minutes ago Exited (0) 5 minutes ago
dbaca913ecc5 ubuntu:16.04 "/bin/bash -it" 7 minutes ago Exited (0) 7 minutes ago
b20c303f2921 ubuntu:16.04 "/bin/bash" 8 minutes ago Exited (0) 8 minutes ago
d317490762a0 ubuntu:16.04 "/bin/echo 'Hello wo..." 13 minutes ago Exited (0) 12 minutes ago
exciting_brattain
PS C:\Users\jcms1> docker rm
"docker rm" requires at least 1 argument.
See 'docker rm --help'.

Usage: docker rm [OPTIONS] CONTAINER [CONTAINER...]

Remove one or more containers
PS C:\Users\jcms1> docker rm bfb
bfb
PS C:\Users\jcms1> docker rm 975
975
PS C:\Users\jcms1> docker rm dba
dba
PS C:\Users\jcms1> docker rm b20
b20
PS C:\Users\jcms1> docker rm d31
d31
PS C:\Users\jcms1> docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
```

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